



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,077	12/09/2003	Volker Kuhnel	36321	3740

116 7590 12/18/2006
PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

PAUL, DISLER

ART UNIT	PAPER NUMBER
----------	--------------

2635

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/731,077	Applicant(s) KUHNEL, VOLKER	
	Examiner Disler Paul	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/24/08</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,3,7-10,12 are rejected under 35 U.S.C. 102(e) as being anticipated by Beck et al. (US 2004/0057591 A1").

Re claim 1, Beck et al. discloses a method for adjusting a first hearing device based on adjustments of a second hearing device ("page 2[0019] line 19-23 & page 2[0028] line 6-10-adjustment made based on received adjustment of second device"), the method comprising the steps of: converting an acoustic test signal into an electric test signal by a microphone of the second hearing device ("fig.1/#2;page 5[0052] line 5"); converting an acoustic signal generated by a receiver of the second hearing device into an electrical signal ("fig 1/#8; page 5[0057] line 7-8"); analyzing the electrical signal in an analyzing unit ("fig.1/#5;fig.2/#17;page 5[0053]line 5-8"); and adjusting the first hearing device based on results obtained in the analysis performed in the analyzing unit ("page 2[0019] line 19-23 &

Art Unit: 2635

page 2[0028] line 6-10; page 5[0057] line 7-8; fig.1/adjustment based on analyzing unit #5 via transmitter#10 to hearing device 1") .

Re claim 3, the method of claim 1, wherein the acoustic test signal is generated in the first hearing device ("fig.1/2; page 3[0034] line 11-14'-input transducer mean to pick up test signal").

Re claim 7, the method of claim 1, wherein the step of analyzing the electrical signal takes place in a control unit provided inside the first hearing device ("fig.1/#5'- analyzing in control unit inside the first hearing device").

Re claim 8, have been analyzed and rejected with respect to claim 7 respectively.

Re claim 9, the method of one of claims 1 to 8, further comprising the step of simultaneously feeding the acoustic test signal to a microphone of the first hearing device for its calibration ("page 4[0048] line 4-8; page 5[0049] line 16-20-calibration may be acquired in hearing band").

Re claim 10, the method of one of the claims 1 to 8, wherein a stationary or a speech-modulated noise is used as acoustic test signal ("page 5[0053] line 1-4").

Re claim 12, the method of one of the claims 1 to 8, further comprising the step of adjusting all available hearing programs of the first hearing device ("page 2[0023]; page3[0031] line 6-8").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2,4-6, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. ("US 2004/0057591 A1") and further in view of Gabara et al. ("US 7,024,000 B1").

Re claim 2, Beck et al further disclose wherein the acoustic test signal is generated in a control unit ("fig.1/#5;5'"). However, Beck et al. fail to disclose the limitation of having the control unit being provided outside the hearing devices.

Gabara et al. discloses of a system in readjusting the performance characteristic of the hearing aid in which the control unit being provided outside the hearing devices ("fig.1-2/#10,13") for the purpose of analyzing hearing test signals.

Therefore, taking the combine teaching of Beck et al. and Gabara et al. as a whole, one skill in the art would have found it obvious to modify Beck et al. to incorporate the control unit being provided outside the hearing devices for the purpose of analyzing hearing test signals.

Re claim 4, the method of claim 1, wherein the step of analyzing the electrical signal takes place in a control unit provided outside the hearing devices ("Gabara,col.4 line 1-5-in response to command, the DSP which act as the analyzer generates frequency tones").

Re claim 5-6, have been analyzed and rejected with respect to claim 4 respectively.

Re claim 11, the method of one of the claims 1, wherein an acoustic test signal is used ("page 3[0034 line 11-14;page 5[0049] line 1-3") being an unmodulated noise ("page 5[0053] travel car-in most cases make unmodulated, not toned down noise"). However, Beck et al. does not disclose the limitation of the noise being with a level step of preferably 25 dB. However, such limitation of noise level of 25db is commonly known in the art as an acceptable level of noise. Thus it would have been obvious for one of ordinary skill in the art to have the noise being at a 25 dB range or level in order to fall within the acceptable range. Official Notice is taken.

Claim Rejections - 35 USC § 103

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. ("US 2004/0057591 A1") and further in view of Bye et al. ("US 2004/0204921A1").

Re claim 13, Beck et al disclose the acoustic test signal ("page 3[0034 line 11-14;page 5[0049] line 1-3"), but fail to disclose the further limitation comprising the step of setting a sound level of 40 to 90 dB SPL.

Bye et al. discloses an improved hearing-related analysis program in which stimulus signals of sound level of zero dB to 100dB ("Bye, page 9[0105] line 14-18") is provided for the purpose of ascertaining the hearing impairments of an individual.

Therefore, taking the combine teaching of Beck et al. and Bye et al. as a whole, one skill in the art would have found it obvious to modify Beck et al. to incorporate the stimulus signals of sound level of zero dB to for the purpose of ascertaining the hearing impairments of an individual.

Claim Rejections - 35 USC § 103

6. Claims 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. ("US 2004/0057591 A1") and Kates ("US 2002/0176584 A1") and further in view of Bye et al. ("US 2004/0204921A1").

Re claim 14, Beck et al. discloses an apparatus comprising a first hearing device; a second hearing device ("fig.1"); a loudspeaker generating a acoustic test signal ("fig.1/#4"); a control unit ("fig.1/#5"); whereas the acoustic test signal is fed to a microphone of the second hearing device ("fig.1/#2"); the first hearing device which is operatively connected to the control unit and to the loudspeaker ("fig.1-in first device in which control unit(#5') is operatively connected to speaker(#4') in the first hearing device").

However, Beck et al. fail to disclose the limitation of having the coupling element containing a measurement microphone.

Kates discloses a digital hearing aid in which coupling element containing a measurement microphone ("fig1B/#116,118") for the purpose of measuring the performance of the hearing aid.

Therefore, taking the combine teaching of Beck et al. and Kates as a whole, one skill in the art would have found it obvious to modify Beck et al. to incorporate the coupling element containing a measurement microphone in the speaker for the purpose of measuring the performance of the hearing aid.

The combined teaching of Beck et al. and Kates as a whole, further teaches the second hearing device in which an acoustic signal is generated and recorded by the measurement microphone of the couple element ("Kates,fig1B-acoustic signal from (#110) is measured by measurement microphone(#118) of couple element(#116)").

Re claim 15, the apparatus of claim 14, wherein a further couple element is provided ("Kates,fig1B/#116"), a receiver of the first hearing device ("Beck,fig.1/8-speaker ac as receiver"); a microphone of the second hearing device ("Beck,fig1/2-microphone"). The combined teaching of Beck et al. and Kates as a whole does not disclose providing coupling to a second hearing device as claimed. However, Kates discloses the coupling being connected to a first hearing device and a second coupling to a computer ("Kates,fig1B-device(#120) connected with computer (#104)"). Thus, one skilled in the art would have found it obvious to substitute the computer with a second hearing device since a second output is provided.

Re claim 16-17, have been rejected and analyzed with respect to claim 10-11 respectively.

Re claim 18, has been analyzed and rejected wt respect to claim 13.

Re claim 19, have been analyzed and rejected with respect to claim 12.

Re claim 20, has been analyzed and rejected wt respect to claim 14

Re claim 21, the apparatus of claim 20, wherein a loudspeaker is operatively connected to the control unit ("Beck, fig. 1-speaker (4, 4') is connected to control unit (5, 5')").

Re claim 22-25, have been analyzed and rejected wt respect to claim 16-19 respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kates (US 7,058,182 B2) pertains to the measuring of own performance of hearing aid.

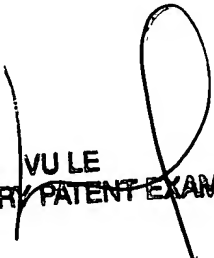
Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-272-2222. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on 571-272-2000. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP


VU LE
SUPERVISORY PATENT EXAMINER